INCOME GENERATION OF WOMEN BY SKILLING IN FOOD PROCESSING AND PRESERVATION

A

Synopsis

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In

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Submitted by

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1. INTRODUCTION

"Millions of women in our hamlets know what employment means. Give them access to economic activity and they will have access to power and self-confidence to which they hitherto have been stranger" (Mahatma Gandhi).

Recently prime minister of India Mr. Narender Modi in his speech suggested that there is need to bring a food processing revolution and value addition in the country through public, private, partnership(PPP). He also emphasized on effective implantation on the budget provision and informed that the government has taken various decisions for the benefit of 12 crore small and marginal farmers. These small and marginal farmers would become the driving force of the rural economy when the countries food gains production increases. He stressed on increasing the number of agro- industries clusteralong the villages so that rural population can get employment related to farming (Modi, 2021).

The food processing sector in India has great growth potential domestically and has export prospects (Singh, 2012 and Rais et al., 2013). It also helps farmers to manage their yields and get better returns since processed foods fetch comparatively higher rates than the raw produce itself. Farmers can increase their income and reduce the unnecessary food wastage which is prevalent in India (Dhiman and Rani, 2011).

1.1. Food processing and preservation:

Food processing is the set of methods and techniques used to transform raw ingredients into food or to transform food into other form for consumption by humans. Food preservation is a process in which food and vegetables are prevented from getting spoilt irrespective of it being carried at home or in industry. The colour, taste and nutritive value of food is also preserved andshelf life of food product is increased for future consumption. A number of food items can be preserved and processed by using different methods like drying, canning, freezing, dehydration, extrusion etc. Different products like jam, jelly, squash, beverages, chips, fruit leather, pickles etc. can be prepared by these methods. The advantage of food preservation is to meet thedemand during the "off season" (Hossain, 2018).

1.2. Functions of food processing and preservation:

According to Sreenivasa (2012), there are two type of food processing functions- traditional and modern:

1.2.1. Traditional food processing functions:

- In this category grain crops which are not edible in their natural stated are processed by techniques, such as milling and grinding to turn them into flour. After that they can be converted into breads, cereals, pasta and other edible grain-based products.
- Processing improves and even ensures food safety by removing harmful microorganisms. The main methods are pasteurization air-tight packaging and the use of preservatives.

1.2.2. Modern food processing functions:

- To make food safe (microbiologically and chemically)
- To provide high quality products (flavour, colour, texture)
- To convert food in edible forms
- To make food affordable (price)

1.3. Emerging food processing and preservation technologies:

According to Knorr et al., (2011), food processing is a series of unit operations to convert unprocessed food-to-foodstuffs with prolonged shelf life and enable storage that abolishes or reduces time or effort spent in culinary procedures for increased consumption. The principle of food processing in the majority of developing countries helps to modify taste, aroma and texture. It help to enhance shelf life as well as aesthetic properties and lead to improve the nutritional value of foods. High-quality foods in greatest demand are also highly perishable foods. Fortunately most perishable foods can be preserved by the judicious use of present technology. With the successful application of commercial food preservation technologies, the availability of perishable foods can be extended, thereby contributing tohuman welfare. In spite of increasing demand for new processed products, the basic principlesof food processing remain same for sustainable availability during scarcity. The processed food industries now struggle to accomplish consumer's expectations for making nutritious, enjoyable, convenient, safe, easily available and affordable supreme quality food items.

According to Hossain (2018), food processing includes traditional (heat treatment, fermentation, pickling, smoking, drying, curing) and modern methods (pasteurization, ultra-heat treatment, high pressure processing, or modified atmosphere packaging). Some of the common methods are described below:

- **Canning**
- **Fermentation**
- **Freezing**
- **Modified atmosphere packaging**
- **Smoking**
- **Additives**

1.4. Need for skill development:

Federation of Indian Chambers of Commerce and Industry (FICC, 2010), suggests that "Skills and knowledge are the driving forces of economic growth and social development for any country. Countries with higher and better levels of skills adjust more effectively to the challenges and opportunities of world. As India moves progressively towards becoming a 'knowledge economy' it becomes increasingly important that the country should focus on advancement of skills. These skills have to be relevant to the emerging economic environment in order to achieve the twin targets of economic growth and inclusive development."

1.5. Self Help Group (SHG) is a model of empowerment:

The year 2001had been declared by the Government of India as "Women's Empowerment Year". It had a focus on a vision where women are equal partners like men". TheConstitution of India provides equality to both men and women in various fields of life. In past, the position of women was miserable in society and even women were not ready to undertake any assignment or job due to many reasons like fear, shyness, male dominance in the societyand purda system.

But time has changed now. In urban and rural areas SHG has emerged as a useful tool in empowering the status of women in India. The government of India has provided SHGs proper attention to give economic independence through self-employment. SHGs have emerged as a powerful instrument to alleviate poverty and for the empowerment of women in the rural economy. SHGs are important not only to reduce rural poverty but also to increase gainful employment in the urban area. Thus, SHG facilitates a process of economic development of women to achieve a better quality of life. Women of today are not like the early days. They are always ready to come forward and want economic independence and greater freedom.

1.6. Self-help groups in India:

The genesis of SHG in India can be traced to the formation of the Self-Employed Women's Association (SEWA) in 1970. The first effort was taken by NABARD in 1985-86 when it supported and funded an action research project on "savings and credit management of self-help groups" of Mysore Resettlement and Development Agency (MYRADA). Self-help groups first emerged in Mysore Resettlement and Development Agency (MYRADA) in 1985. In March'2010, there were 12,050 SHGs in MYRADA's project. Many had emerged from the breakdown of the large cooperatives organized by MYRADA. This was the concept of economic empowerment of the poor through the formation and nurturing of self-help groups.

According to NABARD,1998 the specific objectives of group formation are:

1. To encourage the saving behavior of group members.
2. To encourage people to take loan for viable productive income generation activities.
3. To increase the socio- economic status of rural poor.
4. To facilitate easy loan availability with low interest rates.
5. To select suitable package of practices/ technology and to transfer them among different stakeholders.

According to Karishma (2019), following are the advantages of SHGs:-

- **Self-confidence**
- **Combating social evils**
- **Women empowerment**
- **Active participation in democracy**
- **Increase employment opportunities in rural India**
- **Easier access to government schemes**
- **Improves the standard of living**
- **Financial discipline**
- **Increased motivation levels**
- **Group effort**

1.7. Need of the study:

The present study is centered around establishing a self- sustainable manufacturing unit by providing adequate inputs of various types in the field of foodprocessing and preservation. Hence the title of the present study emerge as:

"Income generation of women by skilling in food processing and preservation"

Being an Intervention based study the objectives of the study are given below:

1.8 Objectives of the study:

1. To identify the food processing and preservation skills prevalent among the rural and tribal women.
2. To sensitize the group and impart/ upgrade the required food processing and preservation skills among the sample.
3. To conduct a market survey for assessing the demand for food processing products.
4. To generate income for women and formulate self help group providing sustainable livelihood.

1.9 Operational definitions:

- **Food Processing and preservation**: Hossain(2018), defined the term 'Food Processing & Preservation' as, a change in the form of the raw food products into the other finished food products by enhancing their utility, purpose and shelf life.
- **Income- Generation:** To undertake a commercial activity of food preservation and processing through which livelihood is earned to enhance the financial support of selected women.
- **SHG:** Arivanantham (2011), defined SHGs as "Small, economically homogeneous and affinity groups of rural/ urban poor, voluntarily formed to save and contribute to a common fund to be lent to its members as per group decision and for working together for social and economic uplift of their families and community".
- **Skill:** According to NSQF(2013), skill means the ability to apply knowledge and use know- how to complete tasks and solve problems. Skill is described as cognitive(involving the use of logical, intuitive, and creative thinking) or practical(involving manual dexterity and the use of methods, materials, tools and instruments).

The present study will have the following delimitations.

1.10 Delimitations:

- The present study will be conducted in only two districts of the selected states, that is Agra (U.P) and Hardha (M.P).
- Interested and willing female candidates will only be selected as a sample for the study.
- The women aged between 18-40 years will only be selected as participants for this study.
- Only the products with high marketing potential will be selected for skill developed andfor sale as well as marketing.

2.0 REVIEW OF LITERATURE

The literature review is a conversation of the available information in a particular subject area. It's a systematic, explicit, reproducible method for identifying, evaluating, synthesizing the existing body of completed record work produced by researchers.

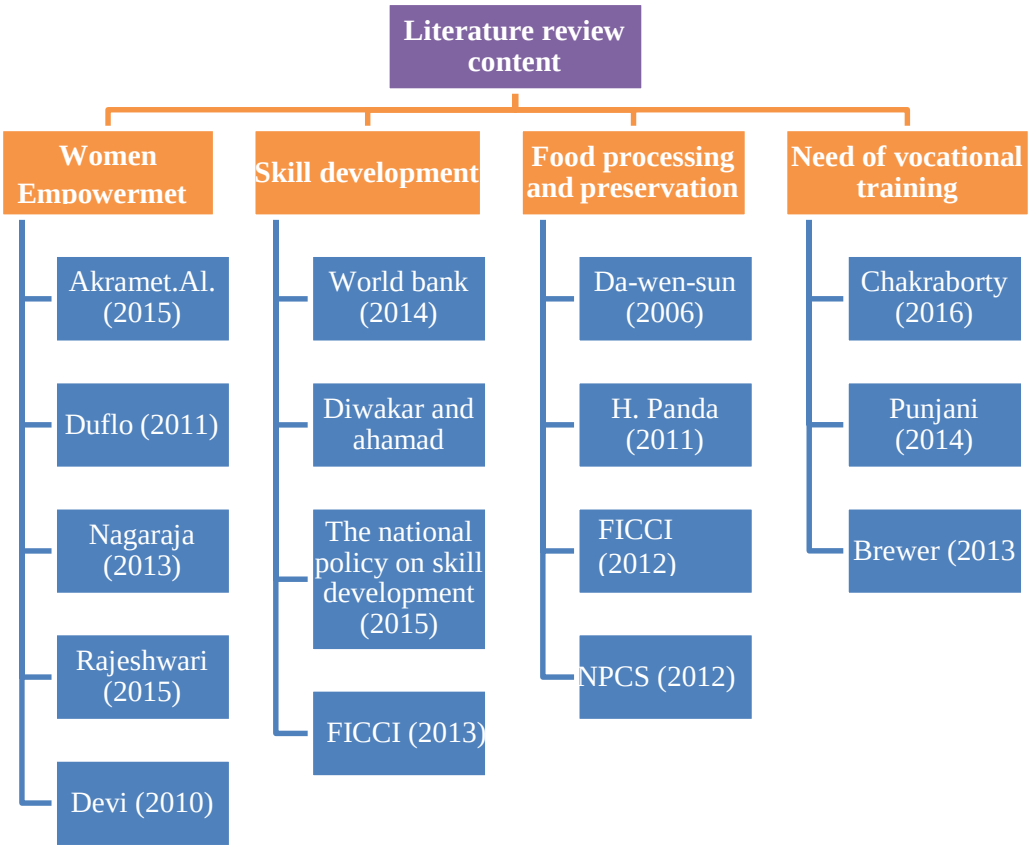

Figure 1. Included researches

Table :1 Review of Literature

Review related to women empowerment				
S. No	**Year**	**Researcher**	**Title of research**	**Major Finding**
1.	2015	Akram et al.	Socio-economic empowerment ofwomen through micro-enterprises: a case study	The study showing that the impact of microenterprises on three dimensions of socio-economic empowerment which included freedom of movement, economic empowerment, and socialupliftment. The results showed that the impact of micro-enterprises remainsslightly low for social uplift, a bit higher for freedom of movement while it contributed most positively to economic freedom.
2.	2011	Duflo	Women's Empowerment and economic development	The study revealed that women's empowerment and economic development are closely interrelated. While development itself brings about women's empowerment, empowering women will bring about changes in decision-making, which will have a direct impact on the development of thecountry.
Review related to skill development				
3.	2014	World Bank	World Bank Report	The study indicated that "acquiring new skills can boost income by 21per cent and training programs boost the employment rate of women more than men although they end up earning 20 percent less than their male counterparts. All government-backed training schemes have a positive impact on income or even employment prospects.
4.	2015	Diwakar & Ahamad	Skills developmen tof women through vocational training.	The study stated that skills and knowledge are the two essential driving forces for the social development and economic growth of any nation. The existence of a skilled human force makes the economy more competitive, innovative, and productive. The study concluded that vocational training through skill development initiatives will be very beneficial for rural women who are engaged in crafts and labor work.
Review related to food processing and preservation				
5.	2006	Da-Wen-Sun	"Emerging Technologie sfor Food processing"	The study focused on modern and innovative tools and techniques for food processing units. The authorgiven a critical review of the use of chemicals in biological preservation in this book. Also described non thermal processing techniques and innovations in food refrigeration are covered.
6.	2011	Panda H.	"The complete Book on Managing Food Processing industry Waste"	The book revealed ideas to reuse the waste in proper methods. It states that the food industry produces large amount of waste. This book gives a complete detail on invaluable waste management concepts, utilization of by-products and the practical methods to implement them. This book dealson the techniques and methods for food processing wastage.
Review related to need of vocational training				
7.	2016	Chakraborty	Overview of Skill Market in India	The study explained about that the Government of India has a target of imparting skills to 500 million youth by 2022. Presently the system has an ability to train about 3 million work force

				against 12 million youth annually. In the present time 90% jobs are skill- based in India and only 6% trained workforce is available in the country.
8.	2014	Punjani	A study on the requirement of skills development for the success of "Make in India" Project	The study described existing policies on skill development require urgent action to put India's millions youth on right skills so that they could compete in global competition for job. The organisational structure needs to incorporate high investment in training setup with simplification.
Review related to self-help group				
9.	2004	Gariyali and Vettivel	Self-help groups and household economic development a case of women self-help groupsin Tamil Nadu India	The study described the dynamics in which the formation of Self-Help Groups and their functioning in Tamil Nadu has created a sort of a revolution. The whole process seems to have taken the proportion of a movement leading to the social, economic and political empowerment of rural poor women.
10.	2017	Mamta and Mokta	Women empowerment in India : A critical analysis	The study founded that women need to find their own way in this male dominated society. They should be motivated for growth & empowerment by self-help groups, NGOs, government policies &micro finance institutions.

3.0 RESEARCH METHODOLOGY

The present study is an intervention-based study with the motive of providing training in food processing and preservation and making it sustainable in the rural and tribal areas. The study will be conducted in three phases namely, pre-intervention phase, intervention phase and post-intervention phase.

3.1 Locale of the study:

The proposed study will be conducted in two states of India ie. Uttar Pradesh (Agra) and Madhya Pradesh(Harda).

3.2 Sample selection:

Sample selection and size of sample play a vital role in achieving the objectives.

3.2.1 Selection of participants:

The selection of sample will be done purposively. The selected villages will be visited in rural and tribal areas.

3.2.2 Selection of sample size:

Total 120 women will be selected for the study.

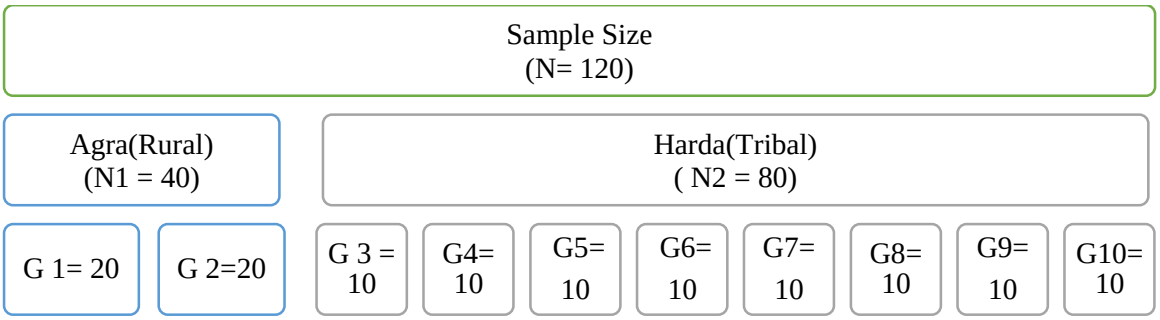

Figure 2. Sample selection

3.2.3 Criteria of sample selection:

In the present study following criteria for selection of women members will be adopted:-

- Women should be between the age of 18-50 years.
- Women who are inclined towards getting training and have an interest to possess basic skills related to food processing and preservation products would be included.
- Those women who want to make a livelihood from it would be included.
- Only married women would be selected.
- Women who are registered in any other livelihood activity will not be included as a samplein the present study.

3.3 Tool used:

The study would use various tools. The details are given below:

S. No	Name	Type	Administration
1.	General Information and skill assessment tool	Schedule	Pre – intervention and post intervention
2.	Schedule to identify Responsible members	Observation Checklist	Intervention
3.	Market AnalysisQuestionnaire	Survey	Pre – intervention

Table 6. Tool proposed to be used in the study

3.1 Phases of Study

The proposed study is an exploratory study and would be carried out in three phases which are further detailed below:

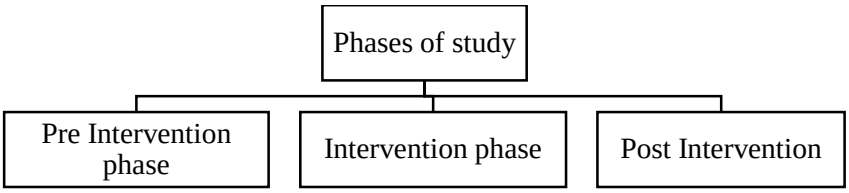

Figure 3. Phases of study

3.1.1 Pre Intervention (Phase 1):

The steps involved in this phase have been presented in fig 3.5.

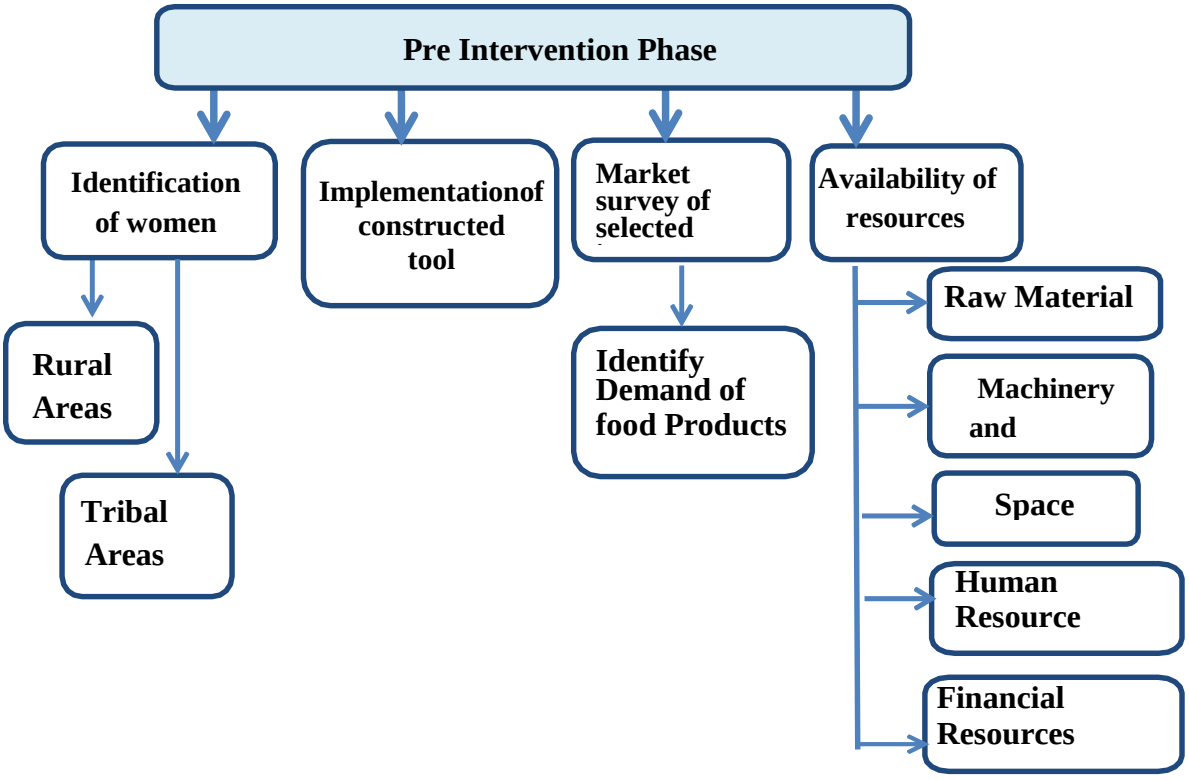

Figure 4. Outline of Pre-intervention phase adopted in the study

3.1.2 Intervention (phase 2):

Incorporation of all type of inputs desired for establishing a processed food manufacturing unit will be accomplished in this phase. The details of all these inputs are presented in Fig 3.2 and further elaborated.

Figure 5. Outline of Intervention Phase adopted in the study

3.1.3 Post intervention (phase-3)

The step involve in the post intervention phase are explained in Fig 3.6.

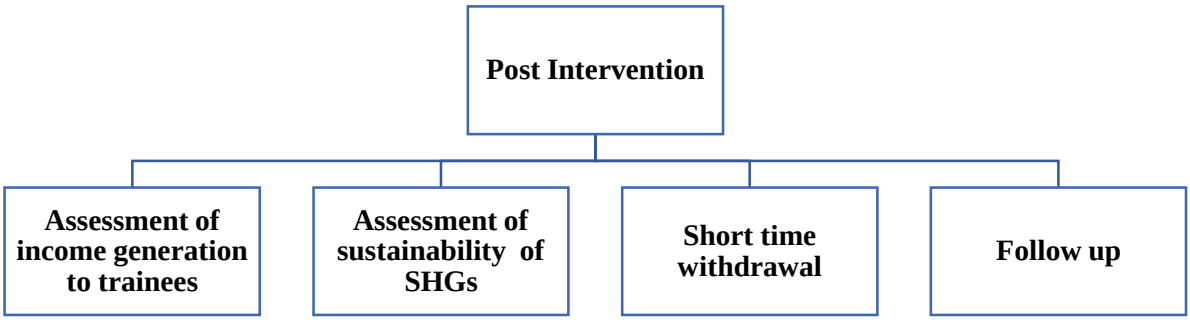

Figure 6. Outline of Withdrawal Phase adopted in the study

3.5 Statistical analysis:

The following statistical technique will be used to analyze the data, as the data emerges other statistical technique may be applied.

- Percentage
- Arithmetic Mean
- Student t- Test

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